

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please CANCEL 1-21, 24-30, and 32 in accordance with the following:

1-21. (CANCELLED)

22. (ORIGINAL) An optical system comprising:

an Er-doped fiber; and

an optical isolator/monitor/amplifier coupled to the Er-doped fiber, said optical isolator/monitor/amplifier comprising:

a broadband single-stage reflection optical isolator; and

a front four-fiber ferrule including a first and a second light input fiber and a first and a second light output fiber, said Er-doped fiber being coupled between the first output light fiber and the second input light fiber, said broadband single-stage reflection optical isolator transmitting light received from one of the light input fibers in a forward direction therethrough to a corresponding one of the light output fibers and preventing transmission of light in a reverse direction to the input fibers; and

monitor/amplifier components monitoring and amplifying the light traveling in the forward direction, wherein a light entering the first input light fiber travels in a forward propagation direction through the optical isolator/monitor/amplifier and is output by the first output light fiber into the Er-doped fiber, which transmits the light to the second input light fiber of the optical isolator/monitor/amplifier, which outputs the light through the second output light fiber.

23. (ORIGINAL) The optical isolator/monitor/amplifier as recited in claim 22, wherein the broadband single-stage reflection optical isolator comprises:

at least one lens collimating the input light and focusing the output light,

a mirror reflecting the ordinary ray sub-lights and the extraordinary ray sub-lights of the input light, and

a single stage broadband polarization independent optical element dividing, deflecting, and rotating the input light such that input light entering the optical isolator/monitor/amplifier from the input fiber passes through the single stage broadband polarization independent optical element onto the mirror, and is reflected by the mirror to the single stage broadband polarization independent optical element and passes therethrough to the output fiber, whereas input light traveling in the reverse propagation direction from the output fiber is prevented from entering the input fiber by the single stage broadband polarization independent optical element, wherein the mirror is a partially-reflective mirror and said monitor/amplifier components receive input counter-pump laser light from a counter-pump laser and input co-pump laser light from a co-pump laser, said monitor/amplifier components comprising a birefringent walk-off plate, a first reciprocally rotating optical element, a Faraday rotator, and a second reciprocally rotating optical element which, when placed in combination with the single stage broadband polarization independent optical element, form single-stage optical isolators preventing the input co-pump laser light from travelling to the counter-pump laser and the input counter-pump laser light from travelling to the co-pump laser.

31. (ORIGINAL) The optical isolator/monitor/amplifier as recited in claim 23, wherein the first reciprocally rotating optical element includes a $\lambda/2$ plate and the second reciprocally rotating optical element includes a $\lambda/2$ plate.

32. (CANCELLED)

33. (ORIGINAL) The optical system as recited in claim 22, wherein the optical isolator/monitor/amplifier further comprises rear ports including two input ports and two output ports.